
















MALLEABLE IRON THREADED FITTINGS



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STANDARDS

MALLEABLE IRON FITTINGS are designed to conform with the following industry standards:

MATERIAL:	ASTM A 197 ASTM A 153	Cupola Malleable Iron Zinc Coatings
DIMENSIONS:	ANSI/ASME B 16.3 ASME B 16.14 ASME B 16.39	Malleable Iron Threaded Fittings Ferrous Pipe Plugs, Bushings, etc. Malleable Iron Threaded Pipe Unions
THREADS:	ANSI/ASME B1.20.1	Pipe Threads. See data below. "Threading."

*PRESSURE-TEMPERATURE RATINGS

MALLEABLE IRON - ANSI B 16.3					
Temperature		Class 150 psig	Class 300 psig ¹		
Degrees C	Degrees F		Size 1/4 - 1	Size 1/4 - 2	Size 2 1/2 - 3
-29 to 66	-200 to 150	300	2000	1500	1000
93	200	265	1785	1350	910
121	250	225	1575	1200	825
149	300	185	1360	1050	735
177	366 ²	150 ¹	1150	900	650
204	400		935	750	560
232	450		725	600	475
260	500		510	450	385
333	550		300	300	300

¹ Permissible for service temperature up to 366°F, reflecting the temperature of saturated steam at 150 psig.

² 14.5 psi = 1 bar = 100 kPa.

*All CCTF iron fittings are air pressure tested under water.

IDENTIFICATION, MARKING

Class 300 Malleable Iron threaded fittings are marked with the numerals "300", the letters "MI", and the size.

Class 150 Malleable Iron threaded fittings have no pressure class markings.

THREADING

All fittings shall be threaded with American National Standard Pipe Threads (ANSI/ASME B1.20.1) and shall have taper threads, except wrought couplings and wrought caps in sizes 1/8, 1/4, 3/8 and 1/2, which may have straight threads.

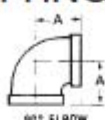
CONVERSION FACTORS

The International System (SI) metric equivalent of British units are shown throughout this catalogue.

NPS (Nominal Pipe Size)	= DN* (Nominal Diameter)
Operating Pressure Class	= PN* (Pressure Number)
1 inch	= 25.4 millimetres
1 pound, weight	= 0.4536 kilograms
1 pound, pressure	= 0.06895 bars

*From the SI designations, Diámetro Nominal and Presion Nominals.

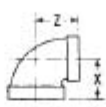
CLASS 150 MALLEABLE IRON THREADED FITTINGS ASTM A197



90° ELBOW



45° ELBOW



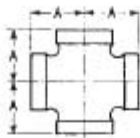
90° REDUCING
ELBOW



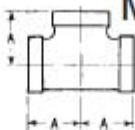
90° ELBOWS				45° ELBOWS				90° REDUCING ELBOWS				90° REDUCING ELBOWS					
Size		Dimension		Size		Dimension		Size		Dimensions		Size		Dimensions			
NPS	DN	A	Approx. Weight	NPS	DN	C	Approx. Weight	NPS	DN	X	Z	Approx. Weight	NPS	DN	X	Z	Approx. Weight
1/8	3	.69	.07	1/8	3	.69	.07	1/4x1/8	6x3	.74	.76	.08	1 1/2x1 1/4	40x32	1.82	1.88	.95
1/4	6	.81	.11	1/4	6	.73	.11	3/8x1/4	10x6	.89	.90	.11	1 1/2x1	40x25	1.65	1.80	.86
3/8	10	1.05	.15	3/8	10	.80	.15	3/8x1/8	10x3	.81	.85	.12	1 1/2x3/4	40x20	1.52	1.75	.86
1/2	15	1.12	.22	1/2	15	.88	.22	1/2x3/8	15x10	1.04	1.09	.19	2x1 1/2	50x40	2.02	2.16	1.4
3/4	20	1.31	.35	3/4	20	.98	.31	1/2x1/4	15x6	.97	.98	.16	2x1 1/4	50x32	1.90	2.10	1.3
1	25	1.50	.55	1	25	1.12	.51	3/4x1/2	20x15	1.20	1.22	.29	2x1	50x25	1.73	2.02	1.1
1 1/4	32	1.75	.93	1 1/4	32	1.29	.75	3/4x3/8	20x10	1.12	1.13	.24	2x3/4	50x20	1.60	1.97	.90
1 1/2	40	1.94	1.1	1 1/2	40	1.43	.97	3/4x1/2	25x6	1.06	1.08	.22	2 1/2x2	55x50	2.39	2.60	2.3
2	50	2.25	1.8	2	50	1.68	1.6	3/4x1/8	25x5	1.13	1.13	.31	2 1/2x1 1/2	55x40	2.16	2.51	2.2
2 1/2	65	2.70	2.9	2 1/2	65	2.17	2.4	1 x 3/4	25x3	1.57	1.45	.46	3x2 1/2	80x65	3.52	3.89	3.7
3	80	3.08	3.9	3	80	2.51	3.3	1x1/2	25x15	1.26	1.26	.41	3x2	80x50	3.52	3.89	3.7
3 1/2	90	3.42	6.2	3 1/2	90	2.90	5.8	1x3/8	25x10	1.18	1.27	.41	4x3	100x80	3.30	3.60	7.7
4	100	3.79	8.2	4	100	3.61	8.2	1 1/4x1	32x25	1.58	1.67	.75					
5	125	4.50	12.6	5	125	3.05	11.5	1 1/4x3/4	32x20	1.45	1.62	.57					
6	150	5.13	19.6	6	150	3.46	13.9	1 1/4x1/2	32x15	1.34	1.53	.51					

*These sizes not specified in ASME/ANSI B16.3

INCHES	POUNDS
MILLIMETRES	KILOGRAMS



CROSS



TEE

CLASS 150 MALLEABLE IRON THREADED FITTINGS ASTM A197

CROSSES				TEES			
Size		Dimension	Approx. Weight	Size		Dimension	Approx. Weight
NPS	DN	A		NPS	DN	A	
1/8		.69	.15	1/8		.69	.09
	3	17.5	.07		3	17.5	.04
1/4		.81	.17	1/4		.81	.11
	6	20.6	.08		6	20.6	.05
3/8		.95	.31	3/8		.95	.20
	10	24.1	.14		10	24.1	.09
1/2		1.12	.30	1/2		1.12	.24
	15	28.5	.14		15	28.5	.11
3/4		1.31	.49	3/4		1.31	.42
	20	33.3	.22		20	33.3	.19
1		1.50	.79	1		1.50	.66
	25	38.1	.36		25	38.1	.30
1 1/4		1.75	1.3	1 1/4		1.75	1.1
	32	44.5	.57		32	44.5	.49
1 1/2		1.94	1.5	1 1/2		1.94	1.3
	40	49.3	.66		40	49.3	.59
2		2.25	2.4	2		2.25	2.0
	50	57.2	1.1		50	57.2	.91
2 1/2		2.70	4.6	2 1/2		2.70	3.6
	65	68.6	2.09		65	68.6	1.61
3		3.08	6.1	3		3.08	5.0
	80	78.2	2.76		80	78.2	2.28
3 1/2		3.42	8.6	3 1/2		3.42	7.2
	90	86.9	3.89		90	86.9	3.28
4		3.79	11.9	4		3.79	9.3
	100	96.3	5.38		100	96.3	4.29
5		4.50	22.0	5		4.50	17.2
	125	114.3	10.0		125	114.3	7.82
6		5.13	23.9	6		5.13	22.9
	150	130.3	10.84		150	130.3	10.40

INCHES
MILLIMETRES

POUNDS
KILOGRAMS

CLASS 150

Malleable Iron Threaded

REDUCING TEES

ASTM A197



STRAIGHT RUN,
REDUCING OUTLET

REDUCED RUN;
OTHER END AND
OUTLET EQUAL

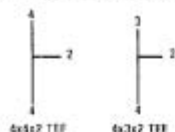
REDUCED ON RUN
AND ON OUTLET

Size		Dimensions			Approx. Weight	Size		Dimensions			Approx. Weight
NPS	DN	X	Y	Z		NPS	DN	X	Y	Z	
1/4 x 1/4 x 1/8		.74	.74	.76	.12	1 x 3/4 x 1		1.50	1.45	1.50	.74
	6 x 6 x 3	18.8	18.8	19.3	.05		25 x 20 x 25	38.1	36.8	38.1	.33
3/8 x 3/8 x 1/4		.88	.88	.90	.20	1 x 3/4 x 3/4		1.37	1.31	1.45	.62
	10 x 10 x 6	22.4	22.4	22.9	.09		25 x 20 x 20	34.8	33.3	36.8	.28
3/8 x 1/4 x 3/8		.95	.90	.95	.19	1 x 3/4 x 1/2		1.26	1.20	1.36	.56
	10 x 6 x 10	24.1	22.9	24.1	.09		25 x 20 x 15	32.0	30.5	35.5	.25
3/8 x 1/4 x 1/4		.88	.81	.90	.20	1 x 1/2 x 1		1.50	1.36	1.50	.68
	10 x 6 x 6	22.4	20.6	22.9	.09		25 x 15 x 25	38.1	35.5	38.1	.31
1/2 x 1/2 x 3/8		1.04	1.05	1.03	.28	1 x 1/2 x 3/4		1.37	1.22	1.45	.59
	15 x 15 x 10	26.4	26.4	26.2	.13		25 x 15 x 20	34.8	31.0	36.8	.27
1/2 x 1/2 x 1/4		.97	.97	.98	.26	1 x 1/2 x 1/2		1.26	1.12	1.36	.59
	15 x 15 x 6	24.6	24.6	24.0	.12		25 x 15 x 15	32.0	28.5	35.5	.27
1/2 x 3/8 x 1/2		1.12	1.03	1.12	.30	1 1/4 x 1 1/4 x 1		1.58	1.58	1.67	1.11
	15 x 10 x 15	28.5	26.2	28.5	.14		32 x 32 x 25	40.1	40.1	42.4	.52
1/2 x 3/8 x 3/8		1.04	.95	1.03	.27	1 1/4 x 1 1/4 x 3/4		1.45	1.45	1.62	.90
	15 x 10 x 10	26.4	24.1	26.2	.12		32 x 32 x 20	36.8	36.8	41.2	.41
1/2 x 1/4 x 1/2		1.12	.98	1.12	.28	1 1/4 x 1 1/4 x 1/2		1.34	1.34	1.53	.86
	15 x 6 x 15	28.5	24.9	28.5	.13		32 x 32 x 15	34.0	34.0	38.9	.39
3/4 x 3/4 x 1/2		1.20	1.20	1.22	.42	1 1/4 x 1 1/4 x 3/8		1.26	1.26	1.44	.75
	20 x 20 x 15	30.5	30.5	31.0	.19		32 x 32 x 10	32.0	32.0	36.6	.34
3/4 x 3/4 x 3/8		1.12	1.12	1.13	.39	1 1/4 x 1 x 1 1/4		1.75	1.67	1.75	1.1
	20 x 20 x 10	28.5	28.5	28.7	.18		32 x 25 x 32	44.5	42.4	44.5	.52
3/4 x 3/4 x 1/4		1.05	1.05	1.08	.35	1 1/4 x 1 x 1		1.58	1.50	1.67	1.1
	20 x 20 x 6	26.7	26.7	27.4	.16		32 x 25 x 25	40.1	38.1	42.4	.52
3/4 x 1/2 x 3/4		1.31	1.22	1.31	.47	1 1/4 x 1 x 3/4		1.45	1.37	1.62	.83
	20 x 15 x 20	33.3	31.0	33.3	.21		32 x 25 x 20	36.8	34.8	41.2	.38
3/4 x 1/2 x 1/2		1.20	1.12	1.22	.42	1 1/4 x 1 x 1/2		1.34	1.26	1.53	.78
	20 x 15 x 15	30.5	28.5	31.0	.19		32 x 25 x 15	34.0	32.0	38.9	.35
3/4 x 3/8 x 3/4		1.31	1.13	1.31	.44	1 1/4 x 3/4 x 1 1/4		1.75	1.62	1.75	1.1
	20 x 10 x 20	33.3	28.7	33.3	.20		32 x 20 x 32	44.5	41.2	44.5	.50
3/4 x 3/8 x 3/8		1.12	.95	1.13	.33	1/4 x 3/4 x 1		1.58	1.45	1.67	.92
	20 x 10 x 10	28.5	24.1	28.7	.15		32 x 20 x 25	40.1	36.8	42.4	.42
3/4 x 1/4 x 3/4		1.31	1.08	1.31	.42	1 1/4 x 3/4 x 3/4		1.45	1.31	1.62	.90
	20 x 6 x 20	33.3	27.4	33.3	.19		32 x 20 x 20	36.8	33.3	41.2	.41
1 x 1 x 3/4		1.37	1.37	1.45	.62	1 1/2 x 1 1/2 x 1 1/4		1.82	1.82	1.88	1.33
	25 x 25 x 20	34.8	34.8	36.8	.28		40 x 40 x 32	46.2	46.2	47.8	.61
1 x 1 x 1/2		1.26	1.26	1.36	.59	1 1/2 x 1 1/2 x 1		1.65	1.65	1.80	1.2
	25 x 25 x 15	32.0	32.0	35.5	.27		40 x 40 x 25	41.9	41.9	45.7	.56
1 x 1 x 3/8		1.18	1.18	1.27	.53	1 1/2 x 1 1/2 x 3/4		1.52	1.52	1.75	1.1
	25 x 25 x 10	30.0	30.0	32.3	.24		40 x 40 x 20	38.6	38.6	44.5	.52
1 x 1 x 1/4		1.11	1.11	1.22	.55	1 1/2 x 1 1/2 x 1/2		1.41	1.41	1.66	.86
	25 x 25 x 6	28.2	28.2	31.0	.25		40 x 40 x 15	35.8	35.8	42.2	.39

Continued on page 7

INCHES	POUNDS
MILLIMETRES	KILOGRAMS

IDENTIFICATION OF REDUCING TEES



CLASS 150

Malleable Iron Threaded

REDUCING TEES

continued

ASTM A197

Size		Dimensions			Approx. Weight	Size		Dimensions			Approx. Weight
NPS	DN	X	Y	Z		NPS	DN	X	Y	Z	
1 1/2 x 1 1/4 x 1 1/2		1.94	1.88	1.94	1.8	2 1/2 x 2 1/2 x 1 1/2		2.16	2.16	2.51	2.9
	40 x 32 x 40	49.3	47.8	49.3	.73		65 x 65 x 40	54.9	54.9	63.8	1.3
1 1/2 x 1 1/4 x 1 1/4		1.82	1.75	1.88	1.3	2 1/2 x 2 1/2 x 1 1/4		2.04	2.04	2.45	2.9
	40 x 32 x 32	46.2	44.5	47.8	.61		65 x 65 x 32	51.8	51.8	62.2	1.3
1 1/2 x 1 1/4 x 1		1.85	1.58	1.80	1.2	2 1/2 x 2 1/2 x 1		1.87	1.87	2.37	2.6
	40 x 32 x 25	41.9	40.1	45.7	.54		65 x 65 x 25	47.5	47.5	60.2	1.2
1 1/2 x 1 1/4 x 3/4		1.52	1.45	1.75	1.1	2 1/2 x 2 1/2 x 3/4		1.74	1.74	2.32	2.2
	40 x 32 x 20	38.6	36.3	44.5	.50		65 x 65 x 20	44.2	44.2	58.9	1.0
2 x 2 x 1 1/2		2.02	2.02	2.16	2.1	2 1/2 x 2 x 2 1/2		2.70	2.60	2.70	4.1
	50 x 50 x 40	51.3	51.3	54.9	.96		65 x 50 x 65	68.6	66.0	68.6	1.9
2 x 2 x 1 1/4		1.90	1.90	2.10	1.9	2 1/2 x 2 x 2		2.39	2.25	2.60	3.3
	50 x 50 x 32	48.3	48.3	53.3	.89		65 x 50 x 50	60.7	57.2	66.0	1.5
2 x 2 x 1		1.73	1.73	2.02	1.6	*2 1/2 x 2 x 1 1/2		2.81	2.81	2.50	4.0
	50 x 50 x 25	43.9	43.9	51.3	.73		*55 x 50 x 40	71.4	71.4	63.5	1.8
2 x 2 x 3/4		1.60	1.60	1.97	1.6	3 x 3 x 2 1/2		2.83	2.83	2.99	4.9
	50 x 50 x 20	40.6	40.6	50.0	.72		80 x 80 x 65	71.9	71.9	76.0	2.2
2 x 2 x 1/2		1.49	1.49	1.88	1.3	3 x 3 x 2		2.52	2.52	2.89	3.9
	50 x 50 x 15	37.9	37.9	47.8	.61		80 x 80 x 50	64.0	64.0	73.4	1.8
*2 x 2 x 3/8		1.49	1.49	1.88	1.6	3 x 3 x 1 1/2		2.29	2.29	2.60	3.7
	*50 x 50 x 10	37.9	37.9	47.8	.73		80 x 80 x 40	58.2	58.2	71.1	1.7
2 x 1 1/2 x 2		2.25	2.16	2.25	2.3	3 x 3 x 1 1/4		2.17	2.17	2.74	3.7
	50 x 40 x 50	57.2	54.8	57.2	1.0		80 x 80 x 32	55.1	55.1	69.6	1.7
2 x 1 1/2 x 1 1/2		2.02	1.94	2.16	2.1	4 x 4 x 3		3.30	3.30	3.60	8.1
	50 x 40 x 40	51.3	49.3	54.9	.96		100 x 100 x 80	83.8	83.8	91.4	3.7
2 x 1 1/2 x 1 1/4		1.90	1.82	2.10	1.8	4 x 4 x 2 1/2		3.05	3.05	3.51	8.1
	50 x 40 x 32	48.3	46.2	53.3	.82		100 x 100 x 65	77.5	77.5	89.2	3.7
2 x 1 1/2 x 1		1.73	1.65	2.02	1.6	4 x 4 x 2		2.74	2.74	3.41	6.8
	50 x 40 x 25	43.9	41.9	51.3	.73		100 x 100 x 50	69.6	69.6	86.6	3.1
2 x 1 1/4 x 2		2.25	2.10	2.25	2.3	4 x 4 x 1 1/2		2.51	2.51	3.32	6.3
	50 x 32 x 50	57.2	53.3	57.2	1.0		100 x 100 x 40	63.8	63.8	84.3	2.9
2 x 1/4 x 1 1/2		2.02	1.88	2.16	1.9	*4 x 4 x 1 1/4		2.75	2.75	3.44	6.1
	50 x 32 x 40	51.3	47.8	54.9	.88		*100 x 100 x 32	69.9	69.9	87.4	2.8
2 x 1 1/4 x 1 1/4		1.90	1.75	2.10	1.9	*4 x 4 x 1		2.75	2.75	3.44	5.8
	50 x 32 x 32	48.3	44.5	53.3	.89		*100 x 100 x 25	69.9	69.9	87.4	2.6
2 x 1 x 2		2.25	2.02	2.25	2.1	6 x 6 x 4		4.13	4.13	4.94	17.9
	50 x 25 x 50	57.2	51.3	57.2	.95		150 x 150 x 100	104.0	104.0	125.5	8.1
2 x 3/4 x 2		2.25	1.97	2.25	2.1	6 x 6 x 3		3.64	3.64	4.75	16.1
	50 x 20 x 50	57.2	50.0	57.2	.95		150 x 150 x 80	92.5	92.5	120.7	7.3
2 x 1/2 x 2		2.25	1.88	2.25	2.1	6 x 6 x 2		3.08	3.08	4.56	13.9
	50 x 15 x 50	57.2	47.8	57.2	.95		150 x 150 x 50	78.2	78.2	115.8	16.3
2 1/2 x 2 1/2 x 2		2.39	2.39	2.60	3.3						
	65 x 65 x 50	60.7	60.7	66.0	1.5						

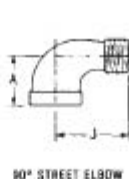
*These sizes not specified by ASME/ANSI B16.3

INCHES	POUNDS
MILLIMETRES	KILOGRAMS

CLASS 150

Malleable Iron Threaded STREET ELBOWS

ASTM A197

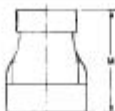


45° STREET ELBOWS					90° STREET ELBOWS					
Size		Dimensions			Approx. Weight	Size		Dimensions		Approx. Weight
NPS	DN	C	K	NPS		DN	A	J		
*1/8	3	.59	.38	.06	1/8	3	.59	1.00	.07	
	3	17.5	22.4	.03		3	17.5	25.4	.03	
1/4	6	.73	.34	.09	1/4	6	.81	1.19	.09	
	6	18.5	23.9	.04		6	20.6	30.2	.04	
3/8	10	.80	1.03	.13	3/8	10	.95	1.44	.13	
	10	20.3	26.2	.06		10	24.1	36.6	.06	
1/2	15	.88	1.15	.17	1/2	15	1.12	1.63	.22	
	15	22.4	29.2	.08		15	28.5	41.2	.10	
3/4	20	.98	1.29	.29	3/4	20	1.31	1.89	.33	
	20	24.9	32.8	.13		20	33.3	48.0	.15	
1	25	1.12	1.47	.46	1	25	1.50	2.14	.55	
	25	28.5	37.3	.21		25	38.1	54.4	.25	
1 1/4	32	1.29	1.71	.79	1 1/4	32	1.75	2.45	.88	
	32	32.8	43.4	.36		32	44.5	62.2	.40	
1 1/2	40	1.43	1.88	.93	1 1/2	40	1.94	2.69	1.1	
	40	36.5	47.8	.42		40	49.3	66.3	.52	
2	50	1.68	2.22	1.5	2	50	2.25	3.26	1.8	
	50	42.7	56.4	.66		50	57.2	82.8	.81	
					2 1/2	65	2.70	3.86	2.9	
						65	68.6	96.0	1.3	
					3	80	3.08	4.51	3.9	
						80	78.2	114.6	1.8	
					4	100	3.79	5.69	8.4	
						100	98.3	144.5	3.8	

*This size not specified in ASME/ANSI B1.1.3



COUPLING



REDUCING COUPLING

CLASS 150 Malleable Iron Threaded COUPLINGS ASTM A197

COUPLINGS				REDUCED COUPLINGS				REDUCING COUPLINGS			
Size		W	Approx. Weight	Size		M	Approx. Weight	Size		M	Approx. Weight
NPS	DN			NPS	DN			NPS	DN		
1/8		.56	.07	1/4 x 1/8		1.00	.08	2 x 1		2.81	.93
	3	24.4	.03		6 x 3	25.4	.04		50 x 25	71.4	.42
1/4		1.06	.07	3/8 x 1/4		1.13	.11	2 x 3/4		2.81	.81
	6	26.9	.03		10 x 6	28.7	.05		50 x 20	71.4	.37
3/8		1.16	.11	3/8 x 1/8		1.13	.11	2 x 1/2		2.81	.90
	10	29.5	.05		10 x 3	28.7	.05		50 x 15	71.4	.41
1/2		1.34	.18	1/2 x 3/8		1.25	.18	2 1/2 x 2		3.25	1.6
	15	34.0	.08		15 x 10	31.8	.08		65 x 50	82.6	.72
3/4		1.52	.26	1/2 x 1/4		1.25	.13	2 1/2 x 1 1/2		3.25	1.4
	20	38.6	.12		15 x 6	31.8	.06		65 x 40	82.6	.62
1		1.67	.44	1/2 x 1/8		1.25	.13	2 1/2 x 1 1/4		3.25	1.5
	25	42.4	.20		15 x 3	31.8	.06		65 x 32	82.6	.67
1 1/4		1.93	.62	3/4 x 1/2		1.44	.22	2 1/2 x 1		3.25	1.0
	32	49.0	.28		20 x 15	36.6	.10		65 x 25	82.6	.46
1 1/2		2.15	.90	3/4 x 3/8		1.44	.22	3 x 2 1/2		3.69	2.4
	40	54.6	.41		20 x 10	36.6	.10		80 x 65	93.7	1.07
2		2.53	1.2	3/4 x 1/4		1.44	.20	3 x 2		3.69	2.1
	50	64.3	.56		20 x 6	36.6	.09		80 x 50	93.7	.94
2 1/2		2.88	1.9	1 x 3/4		1.69	.35	3 x 1 1/2		3.69	1.9
	65	73.2	.88		25 x 20	42.9	.16		80 x 40	93.7	.89
3		3.18	2.6	1 x 1/2		1.69	.31	3 x 1 1/4		3.69	2.0
	80	80.8	1.2		25 x 15	42.9	.14		80 x 32	93.7	.92
*3 1/2		3.74	4.5	1 x 3/8		1.69	.31	3 x 1		3.69	2.0
	*90	95.0	2.0		25 x 10	42.9	.14		80 x 25	93.7	.93
4		3.69	4.6	1 x 1/4		1.69	.30	*3 1/2 x 3		4.0	4.0
	100	93.7	2.1		25 x 6	42.9	.13		*90 x 80	101.6	.22
*5		4.25	6.6	1 1/4 x 1		2.06	.55	*3 1/2 x 2 1/2		4.0	.44
	*125	108.0	3.0		32 x 25	52.3	.25		*90 x 65	101.6	2.0
*6		4.75	9.9	1 1/4 x 3/4		2.06	.49	*3 1/2 x 2		4.0	4.2
	*150	120.7	4.5		32 x 20	52.3	.22		*90 x 50	101.6	1.9
				1 1/4 x 1/2		2.06	.44	4 x 3 1/2		4.38	4.2
					32 x 15	52.3	.20		100 x 90	111.3	1.9
				1 1/2 x 1 1/4		2.31	.70	4 x 3		4.38	3.9
					40 x 32	58.7	.32		100 x 80	111.3	1.8
				1 1/2 x 1		2.31	.62	4 x 2 1/2		4.38	3.7
					40 x 25	58.7	.28		100 x 65	111.3	1.7
				1 1/2 x 3/4		2.31	.59	4 x 2		4.38	3.6
					40 x 20	58.7	.27		100 x 50	111.3	1.6
				1 1/2 x 1/2		2.31	.55	4 x 1 1/2		4.38	3.3
					40 x 15	58.7	.25		100 x 40	111.3	1.5
				2 x 1 1/2		2.81	1.0				
					50 x 40	71.4	.46				
				2 x 1 1/4		2.81	.97				
					50 x 32	71.4	.44				

*These sizes not specified in ASME-ANSI B16.3

*These sizes not specified in ASME-ANSI B16.3

POUNDS
KILOGRAMS
INCHES
MILLIMETRES

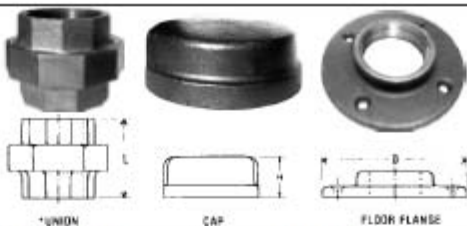
CLASS 150

Malleable Iron

THREADED

FITTINGS

ASTM A197



*UNIONS				CAPS (ANSI B16.3)				FLOOR FLANGES			
Size		L	Approx. Weight	Size		H MIN	Approx. Weight	Size		D	Approx. Weight
NPS	DN			NPS	DN			NPS	DN		
1/4		1.32	.20	1/8		.53	.04	1/4		2.62	.24
	6	33.5	.09		3	13.5	.02		6	66.5	.11
3/8		1.52	.31	1/4		.63	.04	3/8		2.94	.37
	10	38.5	.14		6	16.0	.02		10	74.7	.17
1/2		1.59	.42	3/8		.74	.09	1/2		3.0	.57
	15	40.5	.19		10	18.8	.04		15	76	.26
3/4		1.91	.56	1/2		.87	.11	3/4		3.3	.68
	20	48.5	.27		15	22.1	.05		20	85	.31
1		2.11	.93	3/4		.97	.18	1		3.8	.82
	25	53.5	.42		20	24.6	.06		25	95	.37
1 1/4		2.32	1.3	1		1.16	.31	1 1/4		4.1	1.2
	32	59.0	.57		25	29.5	.14		32	105	.54
1 1/2		2.58	1.7	1 1/4		1.28	.53	1 1/2		4.5	1.5
	40	65.5	.78		32	32.5	.24		40	115	.66
2		2.85	2.6	1 1/2		1.33	.57	2		5.1	2.1
	50	72.5	1.2		40	33.8	.26		50	130	.96
2 1/2		3.29	4.6	2		1.45	.88	2 1/2		6.75	2.6
	65	83.5	2.1		50	36.8	.40		65	171.5	1.1
3		3.66	5.7	2 1/2		1.70	1.5	3		7.00	3.8
	80	99.0	2.6		65	43.2	.70		80	177.8	1.72
4		4.51	10.1	3		1.80	1.9				
	100	114.5	4.6		80	45.7	.86				
				3 1/2		1.90	-				
					90	48.3	-				
				4		2.08	3.5				
					100	52.8	1.6				
				5		2.32	-				
					125	58.0	-				
				6		2.55	7.3				
					150	64.8	3.20				

*Sizes 1" through 4" (DN 25 thru 100) conform to ASME/ANSI B16.35.

INCHES	POUNDS
MILLIMETRES	KILOGRAMS



HEX HEAD BUSHING



SQUARE HEAD PLUG



MALLEABLE IRON THREADED FITTINGS

ASTM A197

HEX HEAD BUSHINGS			HEX HEAD BUSHINGS			SQUARE HEAD PLUGS		
Size		Approx. Weight	Size		Approx. Weight	Size		Approx. Weight
NPS	DN		NPS	DN		NPS	DN	
1/4 x 1/8		.02	2 x 1		.81	1/8		.02
	6 x 3	.01		50 x 25	.37		3	.01
3/8 x 1/8		.02	2 x 1 1/2		.70	1/4		.02
	10 x 3	.01		50 x 40	.32		6	.01
3/8 x 1/4		.04	2 1/2 x 1		1.5	3/8		.04
	10 x 6	.02		65 x 25	.70		10	.02
1/2 x 1/8		.09	2 1/2 x 1 1/4		1.5	1/2		.09
	15 x 3	.04		65 x 32	.67		15	.04
1/2 x 1/4		.07	2 1/2 x 1 1/2		1.3	3/4		.11
	15 x 6	.03		65 x 40	.56		20	.05
1/2 x 3/8		.07	2 1/2 x 2		1.1	1		.15
	15 x 10	.03		65 x 50	.49		25	.07
3/4 x 1/8		.15	3 x 1		2.2	1 1/4		.26
	2 x 3	.07		80 x 25	1.0		32	.13
3/4 x 1/4		.15	3 x 1 1/4		2.2	1 1/2		.35
	20 x 6	.07		80 x 32	.99		40	.16
3/4 x 3/8		.13	3 x 1 1/2		2.2	2		.55
	20 x 10	.06		80 x 40	.99		50	.26
3/4 x 1/2		.11	3 x 2		2.0	2 1/2		.97
	20 x 15	.05		80 x 50	.91		65	.44
1 x 1/4		.26	3 x 2 1/2		1.5	3		1.4
	25 x 6	.12		80 x 65	.66		80	.63
1 x 3/8		.24	4 x 1		4.0	3 1/2		2.5
	2 x 10	.11		100 x 25	1.6		90	1.1
1 x 1/2		.22	4 x 1 1/4		4.0	4		2.5
	25 x 15	.10		100 x 32	1.8		100	1.1
1 x 3/4		.20	4 x 1 1/2		4.0	5		5.4
	25 x 20	.09		100 x 40	1.8		125	2.4
1 1/4 x 1/2		.37	4 x 2		3.7	6		7.5
	32 x 15	.17		100 x 50	1.7		150	3.4
1 1/4 x 3/4		.35	4 x 2 1/2		3.3			
	32 x 20	.16		100 x 65	1.5			
1 1/4 x 1		.29	4 x 3		3.1			
	32 x 25	.13		100 x 80	1.4			
1 1/2 x 3/4		.53						
	40 x 20	.24						
1 1/2 x 1		.49						
	40 x 25	.22						
1 1/2 x 1 1/4		.31						
	40 x 32	.14						
2 x 1/2		.84						
	50 x 15	.38						
2 x 3/4		.86						
	50 x 20	.30						

*Sizes NPS 1/8 & 1/4 (DN 3 & 6) are solid, all other sizes coned.

INCHES
MILLIMETRES

POUNDS
KILOGRAMS

STANDARDS

MALLEABLE IRON FITTINGS are designed to conform with the following industry standards:

MATERIAL:	ASTM A 197 ASTM A 153	Cupola Malleable Iron Zinc Coatings
DIMENSIONS:	ANSI/ASME B 16.3 ASME B 16.14 ASME B 16.39	Malleable Iron Threaded Fittings Ferrous Pipe Plugs, Bushings, etc. Malleable Iron Threaded Pipe Unions
THREADS:	ANSI/ASME B1.20.1	Pipe Threads. See data below. "Threading."

*PRESSURE-TEMPERATURE RATINGS

MALLEABLE IRON - ANSI B 16.3					
Temperature		Class 150 psig	Class 300 psig ¹		
Degrees C	Degrees F		Size 1/4 - 1	Size 1/4 - 2	Size 2 1/2 - 3
-29 to 66	-200 to 150	300	2000	1500	1000
93	200	265	1785	1350	910
121	250	225	1575	1200	825
149	300	185	1360	1050	735
177	366 ²	150 ¹	1150	900	650
204	400		935	750	560
232	450		725	600	475
260	500		510	450	385
333	550		300	300	300

¹ Permissible for service temperature up to 366°F, reflecting the temperature of saturated steam at 150 psig.

² 14.5 psi = 1 bar = 100 kPa.

*All CCTF iron fittings are air pressure tested under water.

IDENTIFICATION, MARKING

Class 300 Malleable Iron threaded fittings are marked with the numerals "300", the letters "MI", and the size.

Class 150 Malleable Iron threaded fittings have no pressure class markings.

THREADING

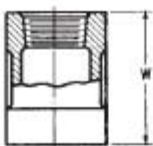
All fittings shall be threaded with American National Standard Pipe Threads (ANSI/ASME B1.20.1) and shall have taper threads, except wrought couplings and wrought caps in sizes 1/8, 1/4, 3/8 and 1/2, which may have straight threads.

CONVERSION FACTORS

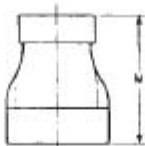
The International System (SI) metric equivalent of British units are shown throughout this catalogue.

NPS (Nominal Pipe Size)	= DN* (Nominal Diameter)
Operating Pressure Class	= PN* (Pressure Number)
1 inch	= 25.4 millimetres
1 pound, weight	= 0.4536 kilograms
1 pound, pressure	= 0.06895 bars

*From the SI designations, Diámetro Nominal and Presion Nominals.



COUPLINGS



REDUCING
COUPLINGS

CLASS 300
Malleable Iron Threaded
COUPLINGS
ASME/ANSI B16.3
ASTM A197

COUPLINGS				REDUCING COUPLINGS			
Size		Dimension		Approx. Weight	Size		Approx. Weight
NPS	DN	W	NPS		DN	M	
1/4		1.37	.17	3/4 x 1/2		1.75	.55
	6	35.1	.08		20 x 15	44.5	.25
3/8		1.82	.26	1 x 3/4		2.00	.83
	10	41.4	.12		25 x 20	50.8	.38
1/2		1.87	.44	1 x 1/2		2.00	.77
	15	47.8	.20		25 x 15	50.8	.35
3/4		2.12	.72	1 1/4 x 1		2.98	1.3
	20	54.1	.33		32 x 25	60.5	.57
1		2.37	1.1	1 1/2 x 1 1/4		2.69	1.8
	25	60.5	.48		40 x 32	68.3	.82
1 1/4		2.87	2.87	2 x 1 1/2		3.19	2.8
	32	73.2	.76		50 x 40	81.0	1.25
1 1/2		2.87	2.1	2 1/2 x 2		3.69	4.5
	40	73.2	.96		65 x 50	93.7	2.0
2		3.62	3.5	3 x 2 1/2		4.06	6.3
	50	92.2	1.59		80 x 65	103.1	2.9
2 1/2		4.12	5.4				
	65	104.9	2.4				
3		4.12	7.4				
	80	104.9	3.6				

INCHES
MILLIMETRES

POUNDS
KILOGRAMS

CLASS 300
Malleable Iron
THREADED FITTINGS
ASTM A197



UNION



CAP

UNIONS (ANSI B16.39)				CAPS (ANSI B16.3)			
Size		Dimension		Size		Dimensions	
NPS	DN	L	Approx. Weight	NPS	DN	H MIN.	Approx. Weight
1/2	15	2.09		.84	1/2	15	
		.53	.29			24.9	.12
3/4	20	2.23	.97	3/4	20	1.08	.39
		56.6	.44			27.4	.18
1	25	2.40	1.5	1	25	1.26	.62
		63.2	.68			32.0	.28
1 1/4	32	2.72	2.2	1 1/4	32	1.38	.98
		.69	1.0			35.1	.44
1 1/2	40	2.95	2.6	1 1/2	40	1.43	1.32
		.75	1.20			36.3	.60
2	50	3.44	4.2	2	50	1.68	1.91
		87.3	1.92			42.7	.87
2 1/2	65	3.89	7.3				
		98.8	3.3				
3	80	4.24	10.5				
		107.8	4.8				